

ABSTRACT

[0038] A brake booster having a housing is separated into a first chamber and a second chamber by a wall connected to a hub. The hub has a cylindrical body with an axial bore that retains a control valve for sequentially connecting the first chamber with the second chamber to provide for the equalization of fluid pressure therein to define a first mode of operation and interrupting communication between the first and second chambers while connecting the second chamber to a surrounding environment to allow air to enter into the second chamber and create a pressure differential across the wall to defining a second mode of operation. The pressure differential acts on the wall to develop an output force that pressurize fluid to effect a brake application. The brake booster is characterized by a first input member responsive to a manual input and a second input member responsive to an ECU for moving the control valve from the first mode to the second mode to respectively develop first and second brake applications. A switch carried by the hub is activated during the second brake application to provide the ECU with a first signal confirming the development of the second brake application while an input force applied to the first input member deactivates the switch and provides the ECU with a second signal to terminate the second brake application and place the development of first brake application under the control of an operator.